CBCS SCHEME

USN | | | | | | | | | |

15EC553

Fifth Semester B.E. Degree Examination, Aug./Sept.2020
Operating System

Time: 3 hrs. Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-1

1 a. Explain goals and key concerns of an operating system. **(08 Marks)**

b. Describe Resource Allocations with diagram. **(08 Marks)**

OR

2 a. Explain time sharing systems. **(08 Marks)**

b. Explain features of distributed operating system. **(08 Marks)**

Module-2

3 a. Explain Operating Systems view of processes. **(08 Marks)**

b. Write note on: i) Process Control Block ii) Event Control Block. **(08 Marks)**

OR

4 a. Explain Threads. **(04 Marks)**

b. Perform FCFS scheduling and find average turn around time, average weighted turn around time of given set of processes.

Processes	P1	P2	P3	P4	P5
Arrival Time (Sec)	0	2	3	4	8
Service Time (sec)	3	3	5	2	3

(06 Marks)

c. Explain long, medium and short term scheduling in time sharing systems. **(06 Marks)**

Module-3

5 a. Explain contiguous memory allocation technique. **(08 Marks)**

b. Explain concept of paging. **(08 Marks)**

OR

6 a. Explain demand paging with diagram. **(08 Marks)**

b. Explain FIFO page replacement policy. **(08 Marks)**

Module-4

7 a. Explain with neat diagram file systems and IOCS. **(08 Marks)**

b. List and explain different file operations. **(08 Marks)**

OR

8 a. Explain with neat diagram Interface between file system and IOCS. **(08 Marks)**

b. Explain Allocation of disk space. **(08 Marks)**

Module-5

9 a. Explain message passing and issues related to it. **(08 Marks)**

b. Explain with diagram mailbox and its advantages. **(08 Marks)**

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OR

10 a. Explain message passing implementation. **(08 Marks)**

b. Describe Resource stat modeling. **(08 Marks)**

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